



**THE UNITED STATES OF AMERICA**

**TO ALL TO WHOM THESE PRESENTS SHALL COME:**

**Dunn Seed Farms, Inc.**

**Whereas, THERE HAS BEEN PRESENTED TO THE  
Secretary of Agriculture**

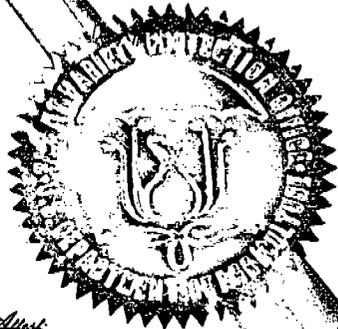
AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Dunn 119'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 28th day of March in the year of our Lord one thousand nine hundred and seventy-four*



*Attest*

*L. J. Rollin*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*Earl R. Batz*  
Secretary of Agriculture

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION <b>Dunn 119</b>	2. KIND NAME <b>Cotton</b>	FOR OFFICIAL USE ONLY	
		PV NUMBER <b>72098</b>	
3. GENUS AND SPECIES NAME <b>Gossypium hirsutum</b>	4. FAMILY NAME (Botanical) <b>Malvaceae</b>	FILING DATE <b>2/28/72</b>	TIME <b>3:00</b> <del>X</del> P.M.
	5. DATE OF DETERMINATION <b>Dec., 1968</b>	FEE RECEIVED <b>\$ 250.00</b>	BALANCE DUE <b>\$ 0.00</b>
6. NAME OF APPLICANT(S) <b>Dunn Seed Farms, Inc.</b>	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Box 358 Lamesa, Texas 79331</b>	8. TELEPHONE AREA CODE AND NUMBER <b>(806)872-8164</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <b>Corporation</b>	10. STATE OF INCORPORATION <b>Texas</b>	11. DATE OF INCORPORATION <b>1-22-68</b>	

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

**James R. Dunn  
Box 358  
Lamesa, Texas 79331**

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- 13B. Exhibit B, Botanical Description of the Variety
- 13C. Exhibit C, Objective Description of the Variety
- 13D. Exhibit D, Data Indicative of Novelty
- 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.)  YES  NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations?  YES  NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? **three**  
 FOUNDATION  REGISTERED  CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

June 30, 1973  
(DATE)

*James R. Dunn*  
(SIGNATURE OF APPLICANT)

1

\_\_\_\_\_  
(DATE)

\_\_\_\_\_  
(SIGNATURE OF APPLICANT)

## INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

## ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

# Dunn Seed Farms, Inc.

BREEDER OF QUALITY COTTONS  
P. O. BOX 358 — 1612 NORTH DALLAS  
LAMESA, TEXAS 79331



February 8, 1974

Mr. J. J. Higgins, Examiner  
Plant Variety Protection Office, Grain Division  
United States Department of Agriculture  
6525 Belcrest Road  
Hyattsville, Maryland 20782

Dear Mr. Higgins:

Subject: Application No. 7148, Cotton, "Dunn 118" and  
Application No. 72098, Cotton, "Dunn 119"

Thank you for your letter of January 29, 1974. In Exhibit A, line 56-C and line 56 are both the same and this line was released as "Dunn 56-C". "Dunn 118" and "Dunn 119" were both selected from "Dunn 56-C". Strains 118 and 119 are "Dunn 118" and "Dunn 119" respectively.

Variants in "Dunn 118" are approximately 1 plant in 80,000 being some 5 to 10 cm. taller and approximately 10 days later maturity.

"Dunn 119" differs from "Dunn 56-C" in (1) being approximately .035 longer in 2.5% span length, (2) approximately 2.7 higher uniformity, (3) approximately .6 higher micronaire, (4) approximately 9.2 higher MPSI Strength, (5) approximately 10 days earlier maturity, and (6) slightly larger bolls (1.8 gram lint per boll).

"Dunn 56-C" matures approximately 5 days earlier than "Lankart 57".  
"Dunn 118" matures approximately 12 days earlier than "Lankart 57".  
"Dunn 119" matures approximately 15 days earlier than "Lankart 57".

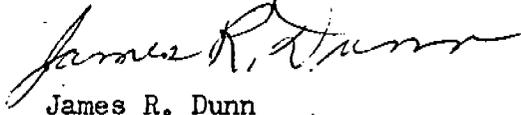
Yarn strength (skein break 22<sup>s</sup>) for "Dunn 56-C" is 111, and for "Dunn 118" is 104, and for "Dunn 119" is 106.

# Dunn Seed Farms, Inc.

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LAMESA, TEXAS 79331

I am enclosing a statement from Mr. Warren Waldrip of the Texas Department of Agriculture concerning stability of these varieties.

Yours very truly,



James R. Dunn

JRD:vee

Enclosure

EXHIBIT A - DUNN 119

A cross between Rex, a commercial cotton variety from Arkansas and CA 398, a breeding line obtained from the A&M Agricultural Station at Lubbock, both varieties of Upland cotton, Gossypium hirsutum was made in winter of 1959 in Iguala, Mexico. The F1 and successive generations were planted in Lamesa, Texas. The pedigree method of handling plant material with progeny testing for evaluating lines was followed. During early generation, selection was practiced for:

1. Stormproofness
2. Earliness
3. Short, compact, stripper type plants
4. Fiber qualities
5. Disease resistance

Only early, stormproof plants with superior fiber qualities were selected in F2 to plant F3 lines.

Beginning with F3, a mixture of strains 1, 2, and 12 of bacterial blight was used to inoculate the plants for selection for blight resistance.

Also, the lines were evaluated on soil infested with Verticillium wilt, Verticillium Albo-atrum.

In F5 a high degree of homozygosity was apparent and selection among lines was practiced. Lines were also increased and strains were evaluated in a strain test for their yield performance. In 1965, line No. 56-C was increased. After 3 years of testing for performance in

several areas on the high plains of Texas, 56-C was released as a commercial variety.

1. In 1966 from an increase block of line No. 56, 300 plants were selected based on:

a. Plant type

A short type plant with plants selected where foliage was lighter than 56-C. Also plants selected were more of an open type than clustry type.

b. Boll type

Plants selected had a semi-stormproof boll where it could be easily adapted as a picker type, with large, fluffy, showy bolls.

c. Earliness

Plants selected were from a week to 10 days earlier in blooming, setting bolls, and open bolls than 56-C. They were tagged during the growing season for earliness.

d. Fiber qualities

The selected plants also had a higher lint % than 56-C 1/32" longer than 56-C and also had a higher uniformity ratio. Fiber maturity was better in the selections than 56-C. Micronaire values were higher, from .3 to .4 points in all selections.

e. Disease Resistance

The selections did not show symptoms of bacterial blight. An artificial inoculum was used to spray the block with. The 300 selections were free of the sumptoms of Verticillium wilt where it was present in the field also.

2. The 300 progenies were grown in 1967 in Lamesa in 50 feet rows non-replicated, preliminary observations and yield data, evaluations for yield, lint %, fiber qualities, and disease resistance. On the basis of all the previous data only 10 progenies were finally selected. Two of these progenies showed a marked improvement in all fiber, agronomic characteristics over other progenies. They were bulked under a number B30-22 or 118. Another progeny, B 30-25 had a high micronaire and coarse fiber. Plants of that progeny were bulked also, and increased as strain 119.
3. The strains 118 and 119 were sent to Mexico for increase, each separately in the winter of 1967. Each was planted in 1/10 acre. All the plants were selfed and then bulk harvested.
4. The strains were planted in Lamesa along with other commercial varieties and Dunn 56-C in a replicated yield trial. (The data from this yield trial is enclosed, statistically analysed.)
5. Increase of the two strains also was carried out in Lamesa, about 5 acres of each strain. They were isolated from other commercial varieties to prevent mixture.
6. Yield evaluations for these two strains in 1968, 1969, 1970 and 1971 are enclosed.

#72098

EXHIBIT B - DUNN 119

Botanical Description

Roots: Normal tap root with lateral roots arising from the tap root.

Main Stem: Short, erect with light hair distribution.

Vegetative branches: One or two side short branches depending on spacing.

Short fruiting branches: Has short internodes (about 1 inch) and a determinate type of plant.

Foliage: Medium with medium size leaf.

Date of first bloom: About 50 days after emergence. The open flower is large and showy. The Corolla is creamy white. The Anthers are white.

Bolls: Elongated, large size. Approximately 60% of bolls have five locks and about 40% with 4 locks.

Seed size: Large seed with seed Index of 11.8 grams. The seed are fuzzy with even distribution of fuzz on seed.

Stormproofness: Semi-stormproof.

Gin turn out: 38% of the seed cotton.

Disease resistance: A high degree of wilt tolerance.

Fiber Qualities: Length                      Strength                      Micronaire  
1 1/16- 1 1/8"                      90,000P.S.I.                      4.8

OBJECTIVE DESCRIPTION OF VARIETY  
COTTON (*GOSSYPIUM SPP.*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) <b>Dunn Seed Farms, Inc.</b> ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)  <b>Box 358 Lamesa, Texas 79331</b>	FOR OFFICIAL USE ONLY
	PVPO NUMBER <b>72098</b>
	VARIETY NAME OR TEMPORARY DESIGNATION <b>Dunn 119</b>

Place the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g.  or ) when number is either 99 or less or 9 or less.

1. SPECIES:

1 = GOSSYPIUM HIRSUTUM      2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

EASTERN       DELTA       CENTRAL       HIGH PLAINS       EL PASO AREA  
 WESTERN LOW HOT VALLEYS       SAN JOAQUIN       OTHER (Specify) \_\_\_\_\_

3. MATURITY (50% Open Boll): *later 2/8/74*

<sup>15</sup> NO. OF DAYS EARLIER THAN .....  } 1 = COKER 310    2 = DELTAPINE 16    3 = STONEVILLE 213  
 NO. OF DAYS LATER THAN .....  } 4 = PAYMASTER 111    5 = ACALA 1517-70    6 = ACALA SJ-1  
7 = LANKART 57    8 = OTHER (Specify) Dunn 56-C

4. PLANT HABIT:

1 = SPREADING    2 = INTERMEDIATE    3 = COMPACT       1 = FOLIAGE SPARSE    2 = DENSE  
3 = OTHER (Specify) \_\_\_\_\_

5. PLANT HEIGHT:

CM. SHORTER THAN .....  } 1 = COKER 310    2 = DELTAPINE 16    3 = STONEVILLE 213  
 CM. TALLER THAN .....  } 4 = PAYMASTER 111    5 = ACALA 1517-70    6 = ACALA SJ-1  
7 = LANKART 57    8 = OTHER (Specify) \_\_\_\_\_

6. MAIN STEM:

1 = LAX    2 = ASCENDING    3 = ERECT       CM. TO FIRST FRUITING BRANCH       NO. OF NODES TO FIRST FRUITING BRANCH (from cotyledonary node)

7. LEAF:

CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENCE:

1 = GLABROUS (HAIRS AS SPARSE AS D<sub>2</sub> SMOOTH)  
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF)    3 = PUBESCENT (STONEVILLE 213)  
4 = HEAVY PUBESCENCE (H<sub>1</sub> OR H<sub>2</sub>)    5 = OTHER (Specify) \_\_\_\_\_

9. LEAF COLOR:

1 = VIRESCENT YELLOW    2 = LIGHT GREEN    3 = DARK GREEN (Acala-442)    4 = RED  
5 = OTHER (Specify) \_\_\_\_\_

10. LEAF TYPE:

1 = NORMAL    2 = OKRA    3 = SUPER OKRA    4 = OTHER (Specify) \_\_\_\_\_

11. FLOWER:

1 = NECTARILESS    2 = NECTARIED

Petals: 1 = CREAM    2 = YELLOW       Pollen: 1 = CREAM    2 = YELLOW

12. FRUITING BRANCH TYPE:

1 = CLUSTER    2 = SHORT    3 = NORMAL       1 = DETERMINATE    2 = INDETERMINATE

13. GOSSYPOL CONDITION:

1 = GLANDLESS    2 = REDUCED GLANDS    3 = NORMAL GLANDS       1 = NORMAL BUD GOSSYPOL  
4 = OTHER (Specify) \_\_\_\_\_    2 = HIGH BUD GOSSYPOL

14. SEEDS:

±  SEED INDEX (Fuzzy seed basis)       Seed Fuzz: 1 = SPARSE (GREGG 35)    2 = MODERATE (DPL-16)    8  
3 = HEAVY (ACALA SJ-1)    4 = OTHER (Specify) \_\_\_\_\_

EXHIBIT D

## Data Indicative of Novelty

Novelty is based on the unique combination of the following characters:

Dunn 119 is very similar to another selection from Dunn 56-C, ~~and~~ Dunn 118 except it has (1) approximately three days earlier maturity (50% open bolls), (2) bolls are slightly larger in diameter (2 m.m.), (3) the PSI is approximately 4,000 pounds stronger, (4) the micronaire is .4 higher than the Dunn 118, and (5) slightly less tolerance to verticillium wilt.

15. BOLLS:

Locules: 1 = 3-4  
 2 = 4-5

Pitted: 1 = NONE  
 2 = FINELY  
 3 = COURSELY

Type: 1 = STORMPROOF (WESTBURN 70)  
 2 = STORM RESISTANT (LANKART 57)  
 3 = OPEN (DELTAPINE 16)

NO. SEEDS PER BOLL: 3 8 0

LINT PERCENT: 3 8 0

MM. DIAMETER: 3 5

GRAMS SEED COTTON PER BOLL: 6 0 0

Breadth: 1 = BROADER AT BASE  
 2 = BROADER AT MIDDLE

Shape: 1 = LENGTH < WIDTH  
 2 = LENGTH = WIDTH  
 3 = LENGTH > WIDTH

16. BRACTEOLAS:

Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

Teeth: 1 = FINE 2 = COURSE

Teeth: 1 = 3-4 2 = 5-7 3 = 8-10  
 4 = OTHER (Specify)

17. YIELD: Compared to-

PERCENT LESS THAN .....

PERCENT MORE THAN .....

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213  
 4 = PAYMASTER 111 5 = ACALA 1517-70  
 6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

SPAN LENGTH 50%: 0 5 0

SPAN LENGTH 2.5%: 1 1 2

MEAN LENGTH:

STAPLE LENGTH 32nd INCHES: 3 4

UNIFORMITY RATIO (MEAN/U.H.M.):

UNIFORMITY INDEX (50% SPAN/2.5% SPAN): 4 5

U.H.M. LENGTH:

19. FIBER STRENGTH AND ELONGATION:

1,000 P.S.I.: 0 9 4

ELONGATION E<sub>1</sub>:

MICRONAIRE READING: 4 8 0

YARN STRENGTH (Give test method): 1 0 6

STILOMETER T<sub>0</sub>:

STILOMETER T<sub>1</sub>: 2 9

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

VERTICILLIUM WILT

FUSARIUM WILT

ROOT KNOT NEMATODE

BACTERIAL BLIGHT (Race 1)

BACTERIAL BLIGHT (Race 2)

ASCOCHYTA BLIGHT

PHYMATOTRICHUM ROOT ROT

RHIZOCTONIA

ANTHRACNOSE

RUST

OTHER (Specify)

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

BOLL WEEVIL

APHID

FLEAHOPPER

LEAFWORM

FALL ARMYWORM

GRASSHOPPER

LYGUS

PINK BOLLWORM

STINKBUG

THRIP

CUTWORM

SPIDERMITE

OTHER (Specify)

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.
- Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.

# Dunn Seed Farms, Inc.

BREEDER OF QUALITY COTTONS

P. O. BOX 358 — 1612 NORTH DALLAS

LAMESA, TEXAS 79331

October 8, 1973

Mr. J. J. Higgins, Examiner  
6525 Bellcrest Road  
Hyattsville, Maryland 20782

Dear Mr. Higgins:

Subject: Application No. 72098  
Cotton, Dunn 119

EXHIBIT D:

Dunn 119 is owned by Dunn Seed Farms, Inc. which is  
totally owned by James R. Dunn.

Yours very truly,



James R. Dunn

JRD:vee

# 72098

EXHIBIT E - DUNN 119

DECLARATION:

I declare that this variety is new and different from any existing varieties and is the product of a breeding program known to me, that the pedigree and origin are known to me and that it has not to my knowledge been sold nor marketed under any other name or designation.

Date February 24, 1972

*James R. Dunn*  
Signature of Breeder or Grower

DUNN SEED FARMS, INC.  
Firm Name

Box 358 Lamesa, Texas 79331  
Address

Subscribed and sworn before me this 24th day of February, 19 72.

*Martha Franklin*, Notary Public in and for

*Dawson* County, Texas.

